

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 08-239655

(43)Date of publication of application : 17.09.1996

(51)Int.Cl.

C09K 11/06

H05B 33/14

(21)Application number : 07-045504

(71)Applicant : IDEMITSU KOSAN CO LTD

(22)Date of filing : 06.03.1995

(72)Inventor : AZUMA HISAHIRO
HOSOKAWA CHISHIO
HIRONAKA YOSHIO

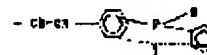
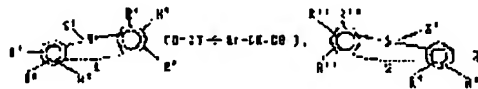
(54) ORGANIC ELECTROLUMINESCENCE ELEMENT

(57)Abstract:

PURPOSE: To obtain an excellent luminescence efficiency by combining a plurality of members selected from electron donating styryl compds. having a vinylene group with each terminal bonded to an aromatic ring or an aromatic heterocyclic ring to incorporate functional layers having an identical function.

CONSTITUTION: An anode having a film thickness of 10 to 200nm is formed on a transparent substrate by vapor deposition of a dielectric material, such as SnO₂. Two or more electron donating styryl compds. represented by the formula I [wherein R₁ to R₁₂ represent H, a halogen, a 1-10C alkyl, a 1-10C alkoxy, a 6-18C aryloxy, or a styryl represented by the formula II (two adjacent styryls optionally combining with each other to form a five- or six-membered ring); Z₁, Z₂, and E represent H, a 1-10C alkyl or the like; Ar represents a 6-20C arylene, a 4-20C divalent arom. heterocyclic group or the like; each dotted line may serve to conduct linking to form a heterocyclic structure; and n is 0 to 2) are co-deposited

to form a luminescence layer having a thickness of 5nm to 5μm, and another functional layer is laminated thereon. A cathode material, such as an Mg/Cu alloy, is then electrodeposited thereon to form a cathode having a film thickness of 50 to 200nm, thereby preparing an org. electroluminescence element.



LEGAL STATUS

[Date of request for examination] 26.04.2001

[Date of sending the examiner's decision of rejection] 19.04.2005

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number] 3724833

[Date of registration] 30.09.2005

[Number of appeal against examiner's decision of rejection] 2005-009236

[Date of requesting appeal against examiner's decision of rejection] 18.05.2005

[Date of extinction of right]